# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	05/15/2018 05/15/2018	Zach Jojola

LM Start		Rating **	Α	Issue No.		4		
LM End		Issue Type +	Ma	Location * N/A				
Catagori Earthen Levee				GPS Latitude/Longitude				
Calegory	Category					End		
Item		s & Maintena	nce		0		0	
пеш	Manuals			0				
DWR ID	DWR_RD2	089_01_s _ 201	3_4					
		Comn	nent Cod	le				
		Inspect	or Comm	nent				
The O&M	The O&M Manual is available at the LMA's office.							

No Photos

LM Start		Rating **	Α	Issue No.		15		
LM End		Issue Type +	Ма	Location *		N/A		
Category Earthen Levee				GPS La	atituc	le/Longitude		
Category				Start		End		
Item		cy Supplies &			٥		0	
Item	Equipmen	nt			0		0	
DWR ID	DWR_RD2	089_01_s _ 201	3_15					
		Comn	nent Cod	de				
	Inspector Comment							
The LMA has flood fighting supplies on-site.								

No Photos

N: Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	05/15/2018 05/15/2018	Zach Jojola

LM Start		Rating **	M	Issue No.		34			
LM End		Issue Type +	Ма	Location *		N/A			
Catagonia Earthen Levee				GPS La	atitud	le/Longitude			
Category	Category					End			
Item	Flood Pre	paredness &	Training		0		0		
пеш					٥		0		
DWR ID	DWR_RD2	089_01_s _ 201	3_34						
		Comn	nent Cod	le					
Inspector Comment									
	The LMA has not attended a flood fight training class in the past few years. They do have an emergency plan.								

No Photos

O CO Delivett M. Issue No.

LM Start	0.03	Rating **	М	Issue No.	24		
LM End	0.79	Issue Type +	Ma	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory		Start		End			
Item	Vegetatio	n		37.81150	)2 °	37.808482 °	
пеш				-121.38544	19°	-121.397826°	
DWR ID	DWR_RD2	089_01_s _ 201	8_24				
	Comment Code						

No Photos

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

LM Start	0.03	Rating **	М	Issue No.		23	
LM End	0.23	Issue Type +	Ma	Location *		LS	
Category	evee	GPS Latitude/Longitude					
Calegory			Start		End		
Item	Vegetatio	n		37.8115	03°	37.810479 °	
item				-121.3854	50°	-121.388952 °	
DWR ID	DWR_RD2	089_01_s _ 201	8_23				
Comment Code							

No Photos

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.03	Rating **	М	Issue No.	1			
LM End	0.03	Issue Type +	Ma	Location *	LS			
Category	evee	GPS Latitude/Longitude						
Calegory			Start		End			
Item	Encroach	ments		37.8115	08°	37.811508°		
пеш				-121.3854	64 °	-121.385464 °		
DWR ID DWR_RD2089_01_s _ 2012_1								
	Comment Code							

ST : Stairway

### Inspector Comment

Steps have been cut into the levee slope, this could become an erosion point, please fill and compact.

# Photo 1 of 1: SP\_2018\_RD2089\_316\_1\_20180507\_00001.jpg



View of the stairs eroding into the landside levee slope.

LM Start	0.24	Rating **	М	Issue No.		940
LM End	0.24	Issue Type +	Ma	Location *		LS
Category	Earthen L	GPS Latitude/Longitude				
Calegory				Start		End
Item	Vegetatio	n		37.8104	12°	37.810412°
iteiii			-121.3891	15 °	-121.389115°	
DWR ID	DWR RD2	089 01 s 201	2 940			

### Comment Code

V2: Remove the wild growth other than native grasses from the levee slopes.

### Inspector Comment

Arundo has been trimmed back from the crown but still remains as an obstruction to the slope and obstructs visibility, needs to be removed.

### Photo 1 of 1: SP\_2018\_RD2089\_316\_940\_20180507\_00042.jpg



The LMA is actively trying to remove the vegetation on the landside levee slope and toe.

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.25	Rating **	М	Issue No.		35	
LM End	0.26	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Vegetatio		37.8103	83°	37.810348 °		
пеш				-121.3892	-121.389373 °		
DWR ID	DWR_RD2	089_01_s _ 201	8_35				
		Comn	nent Cod	le			
V1 : Contro	ol annual g	rass and wee	ds on th	e levee slo	pes a	and	
easements	S.						
		Inspecto	or Comm	nent			

No Photos

LM Start	0.26	Rating **	М	Issue No.		13	
LM End	0.27	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	2017 Stor	m Damage		37.81030	°	37.810300	0
item				-121.38930	°	-121.389500	0
DWR ID	DWR_RD2	089_01_f _ 201	7_13				

### Comment Code

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:513

Site Designation:LMA-419

Repair Type: Erosion Rating:Area of Concern

Field Date:8/14/2017

Notes: Small erosion at toe.



### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.26	Rating **	М	Issue No.		13 (cont)	
LM End	0.27	Issue Type +	Ma	Location *			
Category	Suppleme	ental	ntal			le/Longitude	
Calegory				Start		End	
Item	2017 Stor	m Damage		37.8103	° 00	37.810300 °	
пеш				-121.3893	° 00	-121.389500 °	
DWR ID DWR_RD2089_01_f _ 2017_13							
	Comment Code						

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:513

Site Designation:LMA-419

Repair Type: Erosion

Rating:Area of Concern Field Date:8/14/2017

Notes: Small erosion at toe.



LM Start	0.27	Rating **	U	Issue No.		Issue No.		12
LM End	0.39	Issue Type +	Ма	Location *		Location *		LS
Category	evee	GPS Latitude/Longitude						
Calegory				Start		End		
Item	Vegetatio	n		37.8103	19°	37.809740 °		
item				-121.3895	10°	-121.391645 °		
DWR ID DWR_RD2089_01_s _ 2012_12								

### Comment Code

 $\ensuremath{\mathsf{V2}}$  : Remove the wild growth other than native grasses from the levee slopes.

### Inspector Comment

Access and visibility completely blocked. 11/10/2011 issue has not changed.

### Photo 1 of 1: SP\_2018\_RD2089\_316\_12\_20180507\_00010.jpg



Thick brush and wild rose completely block access and visibility of landside slope and toe.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.33	Rating **	U	Issue No.		19	
LM End	0.33	Issue Type +	Ma	Location *		LS	
Earthen Levee				GPS La	atitud	le/Longitude	
Calegory	Category					End	
Item	Vegetation			37.810002 °		37.810002°	
пеш				-121.3906	74°	-121.390674°	
DWR ID	DWR_RD2	089_01_s _ 201	2_19				
		Comn	nent Cod	le			
V2 : Remove the wild growth other than native grasses from the levee slopes.							
Inspector Comment							

 LM Start
 0.33
 Rating \*\*
 U
 Issue No.
 19 (cont)

 LM End
 0.33
 Issue Type +
 Ma
 Location \*
 LS

Arundo is thick and blocks visibility and access.



View of the arundo back on the landside levee slope. Fall 2016

Photo 2 of 2: SP\_2018\_RD2089\_316\_19\_20180507\_00018.jpg



Arundo was trimmed back from the road and needs to be maintained so that it does not obstruct visibility and access to the landside toe.

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.41	Rating **	М	Issue No.		28
LM End	0.46	Issue Type +	Ma	Location *	LS	
Category	evee	GPS La	titud	le/Longitude		
Calegory				Start		End
Item	Vegetatio	n		37.80959	3°	37.809507 °
пеш				-121.39196	3°	-121.392907 °
DWR ID DWR_RD2089_01_s _ 2012_28						

#### Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Vegetation is too thick to allow access and visibility. Some thick patches of shrubs remain and continue to block visibility and access.



05/24/2011 Photo shows thick dead vegetation and continuation of trees in area that are preventing access and visibility of landside slope and toe.

LM Start	0.47	Rating **	С	Issue No.		29
LM End	0.78	Issue Type +	Ma	Location *		WS
Category Earthen Levee				GPS La	atitud	le/Longitude
Calegory	negory			Start		End
Item	Vegetatio	n		37.8095	59°	37.808648 °
пеш			-121.3929	48 °	-121.397746 °	
DWR ID DWR_RD2089_01_f _ 2016_29						

Comment Code

 $\ensuremath{\mathsf{V2}}$  : Remove the wild growth other than native grasses from the levee slopes.

### Inspector Comment

Tumbleweeds and other tall vegetation are on the levee slope.

No Photos

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.47	Rating **	М	Issue No.		27	
LM End	0.75	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory			Start		End		
Item	Vegetation			37.809592°		37.809039°	
пеш				-121.392993 °		-121.397487 °	
DWR ID	DWR_RD2	089_01_f _ 201	6_27				
		Comn	nent Cod	le			
V2 : Remove the wild growth other than native grasses from the levee slopes.							
	Inspector Comment						



View of the vegetation on the landside levee slope.

LM Start	0.54	Rating **	М	Issue No.		14	
LM End	0.54	Issue Type +	Ма	Location *		CR	
Category Earthen Levee			GPS La	atitud	e/Longitude		
Calegory				Start		End	
ltom	Item				87°	37.810087 °	
item					00°	-121.394200 °	
DWR ID DWR_RD2089_01_s _ 2012_14							
Comment Code							
C3: Add a	ppropriate	gravel or road	d base.	Grade and	com	pact.	
Inspector Comment							
11/10/2011 Minor depressions will cause ponding.							



11/10/2011 Depressions in crown.

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.67	Rating **	A/W	Issue No.		5
LM End	0.67	Issue Type +	Ma	Location *		WS
Category Supplemental			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR Erosion Survey			37.8097	80°	37.809780°
пеш				-121.3962	30°	-121.396230 °
DWR ID	RD2089U0	1RM29.61				

# Inspector Comment

Comment Code

. 09/13/2017: No significant change observed.

07/25/2016: No significant change observed.

06/25/2015: No significant change observed.

07/02/2014: No significant change observed. 08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: The 5-foot vertical scarp shows no significant change from the last year inspection. No new erosion activities observed. Dense white willow trees on site.

09/07/2010: It was difficult to view the erosion due to the thick Willow thickets and other vegetation at the water line. At the time of the inspection, there were no signs of repair on site. As noted during the last survey, there is a 5-foot vertical scarp along the lower slope that may be subjected to high flow velocities.

08/05/2010: Recommended for repair, per CLRO; "Erosion of this site may be subjective to rapid rates of erosion."

09/28/2009: No major change observed; 5-foot vertical scarp is immediately downstream of where berm has tapered; site is recommended as local maintenance issue, per CLRO CES Evaluation 2008 Report; Site # is the same as RM29.6, LM0.60; previously rated "U".

11/05/2008: No change observed; rodent holes on lower slope; wide levee crown. [2017 Site ID:RD2089U01RM29.61]

LM Start	0.67	Rating **	A/W	Issue No.	5 (cont)
LM End	0.67	Issue Type +	Ma	Location *	WS

### Photo 1 of 2: SP\_2018\_RD2089\_316\_5\_20180507\_00007.jpg



Front view of the site. The scarp erosion is at the levee slope but is not visible due to the dense begetation at the site.

#### Photo 2 of 2: SP\_2018\_RD2089\_316\_5\_20180507\_00008.jpg



Front view of the site. Note the very dense white willow thickets on site.

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.67	Rating **	A/W	Issue No.		20
LM End	0.68	Issue Type +	Ma	Location *		
Category			GPS Latitude/Longitude			
Calegory				Start		End
Item	2017 Stor	2017 Storm Damage			° 00	37.809700°
item				-121.3963	° 00	-121.396400 °
DWR ID DWR_RD2089_01_f _ 2017_20						
Comment Code						

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:512

Site Designation:LMA-418

Repair Type: Erosion

Rating:Serious

Field Date:8/14/2017

Notes: deep erosion more than half way up slope.

LM Start	0.67	Rating **	A/W	Issue No.	20 (cont)
LM End	0.68	Issue Type +	Ma	Location *	



Photo 2 of 3: LEVAL\_SP\_2018\_512\_4458.jpg



### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.67	Rating **	A/W	Issue No.	20 (cont)	
LM End	0.68	Issue Type +	Ma	Location *		
Category Supplemental			GPS Latitude/Longitude			
			Start		End	
Item	2017 Stor	2017 Storm Damage			00°	37.809700°
пеш				-121.396300 °		-121.396400 °
DWR ID DWR_RD2089_01_f _ 2017_20						
Comment Code						

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:512

Site Designation:LMA-418

Repair Type: Erosion

Rating:Serious

Field Date:8/14/2017

Notes: deep erosion more than half way up slope.

Photo 3 of 3 : LEVAL_SP	_2018_512_4464.jpg
NAME OF THE PARTY	
	PANAL DET
外大文文	
	TO THE STATE OF TH

LM Start	0.80	Rating **	М	Issue No.		22	
LM End	0.80	Issue Type +	Ma	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory			Start		End		
Item	Slope Stability			37.808466 °		37.808466 °	
item				-121.397847 °		-121.397847 °	
DWR ID DWR_RD2089_01_f _ 2016_22							

### Comment Code

S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.

### Inspector Comment

### Photo 1 of 1: SP\_2018\_RD2089\_316\_22\_20180507\_00024.jpg



View of the footpath on the landside levee slope.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.82	Rating **	M	Issue No.		21	
LM End	0.94	Issue Type +	Ма	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Vegetation			37.8080	43°	37.806442 °	
пеш		-121.3978	53°	-121.397747°			
DWR ID DWR_RD2089_01_f _ 2016_21							
Comment Code							
V2 : Remove the wild growth other than native grasses from the levee slopes.							
		Inspecto	or Comm	nent			
Willows starting to encroach onto levee crown.							

Photo 1 of 2 : SP_2018_RD2089_316_21_20180507_00022.jpg
TO THE STATE OF TH
0W12/2017

The willows are starting to creep up the levee slope.

### Photo 2 of 2 : SP\_2018\_RD2089\_316\_21\_20180507\_00023.jpg



View of the vegetation on the waterside levee slope. The willows were trimmed back.

LM Start	0.82	Rating **	M	Issue No.	21 (cont)
LM End	0.94	Issue Type +	Ma	Location *	WS

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.94	Rating **	A/W	Issue No.	33		
LM End	0.94	Issue Type +	Ma	Location *	WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category			Start		End		
Item	Vegetatio		37.806397°		37.806397 °		
item				-121.397758 °		-121.397758°	
DWR ID	DWR_RD2	089_01_s _ 201	2_33				
		Comn	nent Cod	le			
V2 : Remove the wild growth other than native grasses from the levee slopes.							
Inspector Comment							
Arundo on waterside impedes visibility and access to waterside slope.							



Arundo was trimmed back and needs to be maintained to allow visibility and access.

LM Start	0.95	Rating **	С	Issue No.		32	
LM End	1.19	Issue Type +	Ma	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
				Start		End	
Item	Vegetatio	n		37.80629	92 °	37.805682°	
пеш				-121.39796	61 °	-121.402203 °	
DWR ID DWR_RD2089_01_s _ 2017_32						·	
Comment Code							

Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

No Photos

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.97	Rating **	М	Issue No.		36	
LM End	1.01	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Vegetation			37.8062	31 °	37.806072 °	
item				-121.3981	71 °	-121.398994°	
DWR ID DWR_RD2089_01_s _ 2018_36							
		Comn	nent Coo	le			
V1 : Contre easements		grass and wee	eds on th	e levee slop	oes	and	
Inspector Comment							

No Photos

LM Start	1.02	Rating **	М	Issue No.		956	
LM End	1.02	Issue Type +	Ma	Location *		LS	
Category	GPS Latitude/Longitude						
Category				Start		End	
Item	Vegetatio	n		37.8060	26°	37.806026	0
пеш				-121.3992	06 °	-121.399206	0

DWR ID DWR\_RD2089\_01\_s \_ 2012\_956

Comment Code

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

Elderberry and tobacco block visibility.

NI	O	D	h۸	+0	0

LM Start	1.07	Rating **	М	Issue No.		957	
LM End	1.07	Issue Type +	Ma	Location *		LS	
Category	evee	GPS Latitude/Longitude					
Category				Start		End	
Item	Vegetation			37.8058	48 °	37.805848 °	
item				-121.4000	03 °	-121.400003 °	
DWR ID DWR_RD2089_01_s _ 2012_957							
Comment Code							

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

Brush blocks access.

No Photos

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	05/15/2018 05/15/2018	Zach Jojola

LM Start	1.12	Rating **	С	Issue No.		16	
LM End	1.12	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory			Start		End		
ltom	Item Animal Control			37.805699	°	37.805699°	
пеш				-121.400952	٥	-121.400952 °	
DWR ID DWR_RD2089_01_f _ 2014_16							
		C		la.			

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

### Inspector Comment

Some rodent holes have collapsed. Backfill the remaining voids in the levee slope.

No Photos

LM Start	1.16	Rating **	A/W	Issue No.		30
LM End	1.18	Issue Type +	Ma	Location *		WS
Category			GPS Latitude/Longitude			
Calegory				Start		End
Item	2017 Stor	m Damage		37.8056	00 °	37.805600 °
пеш			-121.4017	00 °	-121.401900°	
DWR ID	DWR RD2	089 01 f 201	7 30			

# Comment Code

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:511

Site Designation:LMA-417

Repair Type: Erosion Rating:Critical

Field Date:8/16/2017

Notes: Narrow levee with over steep slope



\* Location

LS: Land Side N/A: Not Applicable

WS: Water Side

CR: Crown

\* Rating

A: Acceptable

M: Minimally Acceptable

U: Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type
Ma: Maintenance Deficiancy

Ob : Design & System Obsolescence En : Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	05/15/2018 05/15/2018	Zach Jojola

LM Start	1.16	Rating **	A/W	Issue No.		30 (cont)		
LM End	1.18	Issue Type +	Ma	Location *		WS		
Category	Suppleme	ental		GPS La	titud	le/Longitude		
Calegory				Start		End		
Itom	2017 Storm Damage			37.8056	00°	37.805600°		
пеш	Item				00°	-121.401900°		
DWR ID DWR_RD2089_01_f _ 2017_30								
Comment Code								

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:511

Site Designation:LMA-417

Repair Type: Erosion

Rating:Critical

Field Date:8/16/2017

Notes: Narrow levee with over steep slope

LM Start	1.16	Rating **	A/W	Issue No.	30 (cont)
LM End	1.18	Issue Type +	Ma	Location *	WS



Photo 3 of 3: LEVAL\_SP\_2018\_511\_4305.jpg



# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	05/15/2018 05/15/2018	Zach Jojola

LM Start	1.17	Rating **	A/W	Issue No.	3		
LM End	1.17	Issue Type +	Ma	Location *	WS		
Category	Suppleme	ental		GPS La	tituc	le/Longitude	
Calegory				Start		End	
Item	DWR Erosion Survey			37.80552	23 °	37.805523 °	
пеш				-121.4017	18°	-121.401718 °	
DWR ID	RD2089U01RM29.1						
Comment Code							

### Inspector Comment

09/13/2017: The erosion is at the upstream of a small tree, inside of a slight river bend. [2017 Site ID:RD2089U01RM29.1]

LM Start	1.17	Rating **	A/W	Issue No.	3 (cont)
LM End	1.17	Issue Type +	Ma	Location *	WS



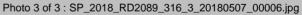
Front view of the erosion. Note the trees next to the erosion site.

### Photo 2 of 3: SP\_2018\_RD2089\_316\_3\_20180507\_00005.jpg



Front view of the erosion.

LM Start	1.17	Rating **	A/W	Issue No.	3 (cont)
LM End	1.17	Issue Type +	Ma	Location *	WS





Front view of the erosion.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	05/15/2018 05/15/2018	Zach Jojola

LM Start	1.19	Rating **	Issue No.		25	
LM End	1.19	Issue Type +	Ma	Location *	WS	
Category	Earthen L	evee	GPS Latitude/Longitude			
Start End						
Vegetation 37.805663 ° 37.805663						
-121.402151 ° -121.402151						
DWR ID DWR_RD2089_01_s _ 2016_25						
Comment Code						

V2 : Remove the wild growth other than native grasses from the levee slopes.

### Inspector Comment

Arrundo was trimmed back but may creep up the waterside levee slope if not maintained.



View of the Arundo on the waterside slope obstructing visibility. LMA is actively trying to remove the wild growth.

LM Start	1.19	Rating **	С	Issue No.		18	
LM End	1.50	Issue Type +	Ma	Location *	LS		
Category	evee	GPS Latitude/Longitude					
						End	
Vegetation				37.80568	1°	37.806604°	
-121.402202 ° -121.40780							
DWR ID DWR_RD2089_01_s _ 2017_18							
Comment Code							

Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

### Inspector Comment

Remove thistle from the levee slope.

No Photos

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	05/15/2018 05/15/2018	Zach Jojola

LM Start	1.19	Rating **	M	Issue No.		31	
LM End	1.50	Issue Type +	Ма	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Vegetation 37.805681 ° 37.80					37.806602 °	
пеш				-121.402202° -121.4077			
DWR ID	DWR_RD2	089_01_s _ 201	7_31				
Comment Code							
V2 : Remove the wild growth other than native grasses from the levee slopes.							
		Inspecto	or Comm	nent			
Remove thistle from the levee slope.							



View of the tall vegetation on the levee slope.

LM Start	1.22	Rating **	М	Issue No.		43		
LM End	1.22	Issue Type +	Ma	Location *		CR		
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Calegory				Start		End		
Crown Surface / Depressions / 37.805735 ° 37.80					37.805735 °			
item	Rutting			-121.4026	-121.402614 °			
DWR ID	DWR_RD2	089_01_s _ 201	2_43					
Comment Code								
C3 : Add appropriate gravel or road base. Grade and compact.								
Inspector Comment								
11/10/2011 Depression needs to be filled.								



11/10/2011 Depression in roadway.

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	05/15/2018 05/15/2018	Zach Jojola

LM Start	1.23	Rating **	М	Issue No. 2			
LM End	1.24	Issue Type +	Ma	Location *	WS		
Supplemental				GPS La	titud	le/Longitude	
Calegory	Category					End	
DWR Erosion Survey				37.8055	80°	37.805580 °	
item	-121.403010 ° -121.40301						
DWR ID RD2089U01RM29.04							
Comment Code							

### Inspector Comment

09/13/2017: No significant change observed. More vegetation observed at the site.

09/16/2016: The river was not navigable near the site due to the dense water grass, so the site was visited by land survey. No significant change observed.

06/25/2015: No significant change observed. 07/02/2014: No significant change observed.

08/13/2013: The erosion is around a tree at the levee toe. Dense

vegetation is visible. [2017 Site ID:RD2089U01RM29.04]

	.ata
Le History Charles	

Photo 1 of 2: SP\_2018\_RD2089\_316\_2\_20180507\_00002.jpg

Front view of the erosion.

# LM Start 1.23 Rating \*\* M Issue No. 2 (cont) LM End 1.24 Issue Type + Ma Location \* WS

Photo 2 of 2: SP\_2018\_RD2089\_316\_2\_20180507\_00003.jpg



Close view of the erosion.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	05/15/2018 05/15/2018	Zach Jojola

Rutting	LM Start	1.23	Rating **	М	Issue No.	44			
Category   Start   End	LM End	1.23	Issue Type +	Ma	Location *	LS			
Start   End	Catagony	Earthen L	evee		GPS La	atitud	le/Longitude		
Rutting -121.402913 -121.40291  DWR_RD2089_01_s _ 2012_44  Comment Code  C3 : Add appropriate gravel or road base. Grade and compact.  Inspector Comment	Calegory				Start		End		
DWR ID DWR_RD2089_01_s _ 2012_44  Comment Code C3 : Add appropriate gravel or road base. Grade and compact.  Inspector Comment	CIOWII SUIIACE / DEDIESSIONS /   37.003001   37.					37.805801 °			
Comment Code C3 : Add appropriate gravel or road base. Grade and compact.  Inspector Comment	item	Rutting			-121.4029	-121.402913 °			
C3 : Add appropriate gravel or road base. Grade and compact.  Inspector Comment	DWR ID DWR_RD2089_01_s _ 2012_44								
Inspector Comment	Comment Code								
,	C3 : Add appropriate gravel or road base. Grade and compact.								
11/10/2011 Depression in roadway needs to be filled.	Inspector Comment								
	11/10/2011 Depression in roadway needs to be filled.								



11/10/2011 Roadway depression.

LM Start	1.30	Rating **	М	Issue No.		37
LM End	1.51	Issue Type +	Ma	Location *		LS
Cotogon/ Earthen Levee				GPS Latitude/Longitude		
Calegory	Category					End
Item	Vegetation			37.8060	65 °	37.806666°
пеш	item				58°	-121.407928 °
DWR ID DWR_RD2089_01_s _ 2018_37						

### Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

### Inspector Comment



View of wild growth on the landside slope. Spring 2018.

LM Start	1.34	Rating **	М	Issue No. 45			
LM End	1.34	Issue Type +	Ma	Location *	CR		
Category Earthen Levee				GPS Lat	itud	le/Longitude	
Calegory	Category					End	
ltom	rface / Depres	ssions /	37.80612	8 °	37.806128°		
Item Rutting -121.404890 ° -121.40489						-121.404890 °	
DWR ID DWR_RD2089_01_s _ 2012_45							
Comment Code							

#### Comment Code

C3 : Add appropriate gravel or road base. Grade and compact.

### Inspector Comment

11/10/2011 Depression needs to be filled.



11//10/2011 Roadway depression.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	05/15/2018 05/15/2018	Zach Jojola

LM Start	1.40	Rating **	М	Issue No.		47
LM End	1.40	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS La	titud	le/Longitude
Calegory			Start		End	
Item	Animal Co	ontrol		37.80626	88°	37.806268 °
пеш				-121.4058	74 °	-121.405874°
DWR ID DWR_RD2089_01_s _ 2012_47						
Comment Code						

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

### Inspector Comment

11/10/2011 No rodents visible, but active burrows are present.



11/10/2011 Active rodent burrow on landside slope.

LM Start	1.40	Rating **	С	Issue No.		26
LM End	1.40	Issue Type +	Ma	Location *		CR
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Animal Co	ontrol	37.8063	06 °	37.806306°	
пеш				Location *  GPS L  Start	52°	-121.405952 °
DWR ID	DWR_RD2	089_01_f _ 201	5_26			

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

### Inspector Comment

Rodent hole is at least 4 ft. deep and needs to be backfilled and compacted.

No Photos

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	05/15/2018 05/15/2018	Zach Jojola

LM Start	1.41	Rating **	М	Issue No.		961	
LM End	1.41	Issue Type +	Ма	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	onsibility	37.80632	3°	37.806323 °	
пеш				-121.40615	5 °	-121.406155 °	
DWR ID							

# Comment Code Inspector Comment

FS\_ID:21585 DS\_ID:23045 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - siphon breaker needs repair.
FIELD\_STRUCT\_DESC: 10-inch steel drainage discharge pipe through the levee, 2.4 feet below the crown. Pump in a drainage ditch on the landside (LS). Siphon breaker on the waterside (WS) shoulder.

[Additional Reference(s): DWR Levee Log, 1991].

FS Date: 9/12/2013

LM Start	1.41	Rating **	М	Issue No.	961 (cont)
LM End	1.41	Issue Type +	Ma	Location *	



WS view: exposed steel pipe on levee slope. A pvc pipe on left.

Photo 2 of 3: UCIP\_SP\_2018\_21585\_36623.jpg



WS view: exposed steel pipe with siphon breaker. Looks siphon breaker needs repair.

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### Reclamation District No. 2089 Stark

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Old River	Right	1.51	05/15/2018 05/15/2018	Zach Jojola

LM Start	1.41	Rating **	М	Issue No.		961 (cont)
LM End	1.41	Issue Type +	Ma	Location *		
Category			GPS La	atitud	le/Longitude	
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	37.8063	23 °	37.806323 °
пеш				-121.4061	55 °	-121.406155 °
DWR ID						
Comment Code						

### Inspector Comment

FS\_ID:21585 DS ID:23045 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - siphon breaker needs repair.
FIELD\_STRUCT\_DESC: 10-inch steel drainage discharge pipe through the levee, 2.4 feet below the crown. Pump in a drainage ditch on the landside (LS). Siphon breaker on the waterside (WS) shoulder.

[Additional Reference(s): DWR Levee Log, 1991].

FS Date: 9/12/2013



LS view: exposed steel pipe on levee slope.

LM Start	1.44	Rating **	М	Issue No.		49
LM End	1.44	Issue Type +	Ма	Location * WS		WS
Category Earthen Levee				GPS Latitude/Longitude		
Calegory				Start		End
Item	Animal Co	ontrol	37.8063	83°	37.806383 °	
item				Start	99°	-121.406599 °
DWR ID DWR_RD2089_01_s _ 2012_49						

### Comment Code

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

### Inspector Comment

Deep burrow on waterside needs to be filled.

### Photo 1 of 1: SP\_2018\_RD2089\_316\_49\_20180507\_00041.jpg



11/10/2011 Deep burrow on waterside.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.01	Rating **	Α	Issue No.		34		
LM End	0.05	Issue Type +	Ma	Location *		WS		
Cotogony	Earthen L	evee		GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Vegetatio	n		37.8066	95 °	37.807195°		
пеш				-121.4079	85 °	-121.408623 °		
DWR ID	DWR ID DWR_RD2089_02_s _ 2018_34							
		Comn	nent Cod	le				
V1 : Contro	ol annual g	rass and wee	ds on th	e levee slop	oes a	and		
easements	S.							
		Inspecto	or Comm	nent				

No Photos

LM Start	0.01	Rating **	U	Issue No.		20
LM End	0.11	Issue Type +	Ма	Location *		LS
Category Earthen Levee				GPS La	atitud	e/Longitude
Calegory						End
Item	Vegetatio	n		37.8067	62°	37.807958°
пеш				-121.4080	77 °	-121.409065 °
DWR ID DWR_RD2089_02_s _ 2016_20						
Comment Code						

Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment



View of the vegetation on the landside levee slope.

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence

En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.06	Rating **	U	Issue No.		58	
LM End	0.06	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		37.8073	06°	37.807306	0
Item				-121.4086	92 °	-121.408692	0
DWR ID	DWR_RD2	089_02_s _ 201	7_58				
		Comn	nent Coo	le			
V4 : Elderb	perries are	blocking visib	ility and	flood fight	сара	ability.	
		Inspecto	or Comm	nent			
Trim back	the shrub	to allow acces	ss and vi	sibility.			

No Photos

LM Start	0.07	Rating **	U	Issue No.		4
LM End	0.07	Issue Type +	Ma	Location *		WS
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Calegory				Start		End
Item	Vegetatio	n		37.8073	75°	37.807375°
пеш				-121.4086	05 °	-121.408605 °

DWR ID DWR\_RD2089\_02\_s \_ 2012\_4

Comment Code

V4 : Elderberries are blocking visibility and flood fight capability.

Inspector Comment

Thick brush may include some elderberries.

N	$\sim$	P٢	nt	റട

LM Start	0.08	Rating **	М	Issue No.	60		
LM End	0.43	Issue Type +	Ma	Location *	WS		
Catagonia Earthen Levee				GPS Lat	itud	e/Longitude	
Calegory	Category				Start		
Item	Vegetatio	n		37.80755	0 °	37.810453	0
пеш						-121.413533	0
DWR ID	DWR_RD2	089_02_s _ 201	8_60				
	Comment Code						

Comment Code

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.12	Rating **	М	Issue No.		61
LM End	0.43	Issue Type +	Ма	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Vegetatio	n		37.8081	11 °	37.810453 °
пеш				-121.4092	03°	-121.413533 °
DWR ID	DWR_RD2	089_02_s _ 201	8_61			
		Comn	nent Cod	le		
V1 : Contre	ol annual g	grass and wee	ds on th	e levee slo <sub>l</sub>	pes a	and
easements	3.					
		Inspecto	or Comm	nent		

No Photos

LM Start	0.16	Rating **	U	Issue No.	48		
LM End	0.16	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory						End	
Item	Animal Co	ontrol		37.80858	3°	37.808583 °	
пеш				-121.40943	2°	-121.409432 °	
DWR ID	DWR_RD2089_02_f _ 2013_48					·	
	Comment Code						

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment



View of the rodent burrow on the landside levee slope.

+ Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence

En : Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.20	Rating **	М	Issue No.	46	
LM End	0.21	Issue Type +	Ma	Location *		
Category Supplemental			GPS Latitude/Longitude			
Calegory	y			Start		End
Item	2017 Stor	m Damage		37.80910	00°	37.809200°
пеш				-121.40980	00°	-121.409900 °
DWR ID	R ID DWR_RD2089_02_f _ 2017_46					
Comment Code						

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:509

Site Designation:LMA-415

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/16/2017

Notes: Displaced riprap at toe.

LM Start	0.20	Rating **	М	Issue No.	46 (cont)	
LM End	0.21	Issue Type +	Ma	Location *		

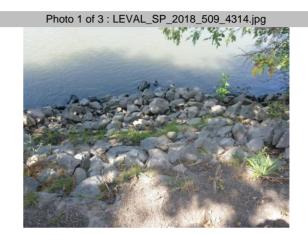


Photo 2 of 3: LEVAL\_SP\_2018\_509\_4315.jpg



### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.20	Rating **	М	Issue No.	46 (cont)		
LM End	0.21	Issue Type +	Ma	Location *			
Category			GPS Latitude/Longitude				
Calegory	egory			Start		End	
Itom	2017 Stor	2017 Storm Damage		37.80910	0°	37.809200	0
пеш	Item			-121.40980	0°	-121.409900	0
DWR ID	DWR_RD2	089_02_f _ 201	7_46				
	Comment Code						

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:509

Site Designation:LMA-415

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/16/2017

Notes: Displaced riprap at toe.

Photo 3 of 3 : LEVAL_SP_2018_509_4317.jpg
A CONTRACTOR OF THE PARTY OF TH

0.21	Rating **	М	Issue No.		49	
0.21	Issue Type +	Ма	Location *		LS	
Category Earthen Levee			GPS Latitude/Longitude			
			Start		End	
Animal Co	Animal Control			48 °	37.809148 °	
ltem			-121.4098	97 °	-121.409897 °	
DWR ID DWR_RD2089_02_s _ 2018_49						
	0.21 Earthen L Animal Co	0.21 Issue Type + Earthen Levee Animal Control	0.21 Issue Type + Ma Earthen Levee Animal Control	0.21         Issue Type +         Ma         Location *           Earthen Levee         GPS La           Start         Start           Animal Control         37.8091           -121.4098	0.21         Issue Type +         Ma         Location *           Earthen Levee         GPS Latitud           Start           Animal Control         37.809148 °           -121.409897 °	

### Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

### Inspector Comment

Photo 1 of 1: SP_2018_RD2089_317_49_2	0180507_00054.jpg



View of the multiple rodent burrows on the landside levee hinge and slope.

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.26	Rating **	М	Issue No.		24		
LM End	0.26	Issue Type +	Ma	Location *	LS			
Category Earthen Levee			GPS Latitude/Longitude					
Calegory			Start		End			
Item	Animal Control			37.8097	17°	37.809717°		
item		-121.4105 <sup>-</sup>	11 °	-121.410511 °				
DWR ID DWR_RD2089_02_s _ 2012_24								

### Comment Code

A1: Exterminate rodents and backfill and compact or grout burrows.

#### Inspector Comment

Ground squirrel sighted and active burrowing in area.



05/24/2011 Active burrows, ground squirrel sighted in area.

LM Start	0.28	Rating **	U	Issue No.		51
LM End	0.28	Issue Type +	Ma	Location *	LS	
Catagony	Category Earthen Levee			GPS Latitude/Longitude		
Category			Start		End	
Item	Animal Control			37.8098	99°	37.809899°
item			-121.4108	89°	-121.410889 °	
DWR ID DWR_RD2089_02_f _ 2013_51						

### Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

### Inspector Comment



View of the rodent burrow on the landside levee toe.

LM Start	0.30	Rating **	U	Issue No.		53	
LM End	0.31	Issue Type +	Ма	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Category	alegory			Start		End	
Item	Animal Co	nimal Control		37.8099	77 °	37.810022	٥
пеш				-121.41118	89 °	-121.411387	0
DWR ID	DWR_RD2	089_02_f _ 201	3_53				

### Comment Code

A1: Exterminate rodents and backfill and compact or grout burrows.

### Inspector Comment

Exterminating rodents and grouting the burrows recommended.



View of the multiple rodent burrows on the landside levee slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.30	Rating **	U	Issue No.	53 (cont)				
LM End	0.31	Issue Type +	Ma	Location *	LS				
Category	Earthen L	evee		GPS La	atitud	le/Longitude			
Calegory				Start		End			
Animal Control			37.8099	77°	37.810022 °				
пеш				-121.411189°		-121.411387 °			
DWR ID	DWR ID DWR_RD2089_02_f _ 2013_53								
		Comn	nent Cod	le					
A1 : Exterr	minate rod	ents and back	fill and o	compact or	grou	it burrows.			
		Inspecto	or Comm	nent					
Extermina	ting rodent	s and grouting	the bur	rows recon	nme	nded.			

Ma

Issue No.

Location 3

53 (cont)

LS



View of the rodent burrow on the landside levee slope.

Photo 3 of 3: SP\_2018\_RD2089\_317\_53\_20180507\_00062.jpg



Another view of the multiple rodent burrows on the landside levee slope.

* Location	
LS: Land Side	N/A: Not Applicable
WS: Water Side	

0.30

0.31

LM Start

LM End

Rating \*\*

Issue Type +

Rating A : Acceptable M : Minimally Acceptable
U : Unacceptable

N: Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.32	Rating **	A/W	Issue No.	47		
LM End	0.57	Issue Type +	Ma	Location *			
Category			GPS Latitude/Longitude				
Category			Start		End		
Item	2017 Storm Damage			37.810020 °		37.811810 °	
item			-121.411550 °		-121.415390 °		
DWR ID	DWR_RD2	089_02_f _ 201	7_47				
Comment Code							

### Inspector Comment

Levee Evaluation Comments

Description: Site ID No:109

Site Designation:335-103 Repair Type: Erosion Rating:Area of Concern Field Date:6/7/2017

Notes: vegetation too dense for evaluation

- total registation to action of a tail addition										
LM Start	0.32	Rating **	A/W	Issue No.	47 (cont)					
LM End	0.57	Issue Type +	Ма	Location *						



Photo 2 of 3: LEVAL\_SP\_2018\_109\_1298.jpg



N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.32	Rating **	A/W	Issue No.	47 (cont)		
LM End	0.57	Issue Type +	Ma	Location *			
Category				GPS La	titud	le/Longitude	
Calegory				Start		End	
Item	2017 Storm Damage			37.81002	20°	37.811810°	
item			-121.41155	0°	-121.415390 °		
DWR ID	DWR_RD2	089_02_f _ 201	7_47				
Comment Code							

### Inspector Comment

Levee Evaluation Comments

Description: Site ID No:109

Site Designation:335-103 Repair Type: Erosion Rating:Area of Concern Field Date:6/7/2017

Notes: vegetation too dense for evaluation



LM Start	0.34	Rating **	М	Issue No.		55	
LM End	0.34	Issue Type +	Ма	Location *		LS	
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory		Start		End			
Item	Trim / Thin Trees			37.8100	52°	37.810052	0
пеш				-121.4119	66 °	-121.411966	0
DWR ID	DWR_RD2089_02_s _ 2017_55						

### Comment Code

T1 : Trim trees to at least five feet above ground level.

### Inspector Comment



View of the overgrown tree on the levee slope.

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

# **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.36	Rating **	М	Issue No.	26		
LM End	0.36	Issue Type +	Ma	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory						End	
Item	Animal Co	Animal Control			25 °	37.810125°	
пеш				-121.4123	17°	-121.412317°	
DWR ID	DWR_RD2089_02_s _ 2012_26						
Comment Code							

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

Active burrow needs to be repaired.



05/24/2011 Active rodent burrow.

LM Start	0.37	Rating **	С	Issue No.		44		
LM End	0.59	Issue Type +	Ма	Location *	WS			
Catagonia Earthen Levee				GPS Latitude/Longitude				
Category		Start		End				
Item	Vegetatio	37.8100	81 °	37.811955	0			
iteiii		-121.4124	49 °	-121.415628	٥			
DWR ID	DWR_RD2089_02_f _ 2016_44							

Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

No Photos

LM Start	0.37	Rating **	С	Issue No.		36		
LM End	0.80	Issue Type +	Ма	Location *	LS			
Category Earthen Levee				GPS Latitude/Longitude				
Calegory		Start		End				
Vegetation				37.81008	1 °	37.814421	0	
пеш				-121.41244	9 0	-121.414203	٥	
DWR ID DWR_RD2089_02_s _ 2012_36								

Comment Code

V2: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Wild growth and dead underbrush prevents visibility of levee slope and area cannot be accessed if needed for a flood fight.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

## **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.39	<b>0.39</b> Rating ** A/W Issue No. <b>50</b>				50	
LM End	0.41	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory		Start		End			
2017 Storm Damage			37.810150°		37.810270		
item		-121.412930 °		-121.413240			
DWR ID DWR_RD2089_02_f _ 2017_50							
Comment Code							

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:508

Site Designation:LMA-414 Repair Type: Erosion Rating:Serious Field Date:8/16/2017

Notes: Large erosion around tree with a 12' vertical cut.

LM Start	0.39	Rating **	A/W	Issue No.	50 (cont)
LM End	0.41	Issue Type +	Ma	Location *	



Photo 2 of 3: LEVAL\_SP\_2018\_508\_4323.jpg



### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

## **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.39	Rating **	A/W	Issue No.	50 (cont)	
LM End	0.41	Issue Type +	Ma	Location *		
Category			GPS Latitude/Longitude			
Calegory			Start		End	
Item	2017 Storm Damage			37.8101	50°	37.810270 °
iteiii			-121.41293	30°	-121.413240 °	
DWR ID DWR_RD2089_02_f _ 2017_50						
Comment Code						

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:508

Site Designation:LMA-414

Repair Type: Erosion

Rating:Serious

Field Date:8/16/2017

Notes: Large erosion around tree with a 12' vertical cut.



### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.40	Rating **	A/W	Issue No.		1	
LM End	0.41	Issue Type +	Ma	Location *		WS	
Category	ental	GPS Latitude/Longitude					
Calegory				Start		End	
Item	DWR Ero	37.8099	60°	37.809960 °			
пеш				-121.4132	00°	-121.413200 °	
DWR ID	DWR ID RD2089U02RM28.35						

### Inspector Comment

Comment Code

09/13/2017: No significant change observed.

09/26/2016: The erosion site was visited by land survey instead of water surface survey due to the dense water grass in the river this year. No significant change observed.

06/25/2015: No significant change observed.

07/02/2014: No significant change observed.

08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed.

08/23/2011: No significant change observed on site.

09/07/2010: Site consists of a jutting rip rap that has created an eddy, scouring the levee slope. Most sections of the toe and lower slope are lined with rip rap. However, the rip rap is sloughing on the mid slope and at the toe, exposing the underlying soils and tree roots. The remaining revetment is no longer adequately protecting the slope.

There are 3 Sycamore trees at the toe with exposed tree roots.

08/05/2010: Recommended for repair, per CLRO.

09/28/2009: Pocket erosion on lower slope just above the toe rip rap; protruding rip rap upstream is creating an eddy, scouring the levee slope; Site # is the same as RM28.40,LM0.30; previously rated "U"; pictures will be made available during the next survey.

11/05/2008: Cut into levee profile; riprap slide; rodent holes; pictures do not match GPS and current condition. [2017 Site ID:RD2089U02RM28.35]

LM Start	0.40	Rating **	A/W	Issue No.	1 (cont)
LM End	0.41	Issue Type +	Ma	Location *	WS

#### Photo 1 of 3: SP\_2018\_RD2089\_317\_1\_20180507\_00001.jpg



Front view of the site.

#### Photo 2 of 3: SP\_2018\_RD2089\_317\_1\_20180507\_00002.jpg



Close view of the erosion.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.40	Rating **	A/W	Issue No.		1 (cont)			
LM End	0.41	Issue Type + Ma		Location *		WS			
Category	Supplemental				GPS Latitude/Longitude				
Calegory			Start		End				
Item	DWR Erosion Survey			37.8099	60°	37.809960 °			
пеш				-121.4132	00°	-121.413200 °			
DWR ID RD2089U02RM28.35									

### Inspector Comment

Comment Code

09/13/2017: No significant change observed.

09/26/2016: The erosion site was visited by land survey instead of water surface survey due to the dense water grass in the river this year. No significant change observed.

06/25/2015: No significant change observed.

07/02/2014: No significant change observed.

08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed.

08/23/2011: No significant change observed on site.

09/07/2010: Site consists of a jutting rip rap that has created an eddy, scouring the levee slope. Most sections of the toe and lower slope are lined with rip rap. However, the rip rap is sloughing on the mid slope and at the toe, exposing the underlying soils and tree roots. The remaining revetment is no longer adequately protecting the slope.

There are 3 Sycamore trees at the toe with exposed tree roots.

08/05/2010: Recommended for repair, per CLRO.

09/28/2009: Pocket erosion on lower slope just above the toe rip rap; protruding rip rap upstream is creating an eddy, scouring the levee slope; Site # is the same as RM28.40,LM0.30; previously rated "U"; pictures will be made available during the next survey.

11/05/2008: Cut into levee profile; riprap slide; rodent holes; pictures do not match GPS and current condition. [2017 Site ID:RD2089U02RM28.35]

Photo 3 of 3: SP\_2018\_RD2089\_317\_1\_20180507\_00003.jpg



Close view of the erosion.

LM Start	0.43	Rating **	M	Issue No.		63	
LM End	1.31	Issue Type +	Ma	Location *	WS		
Category	GPS La	atitud	le/Longitude				
Calegory	Category					End	
Item	Vegetatio	n		37.8104	53°	37.819111	0
пеш	item				32°	-121.419801	0
DWR ID	DWR_RD2	089_02_s _ 201	8_63				

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Comment Code

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.43	Rating **	М	Issue No.		62		
LM End	0.93	Issue Type +	Ma Location *			LS		
Earthen Levee				GPS Latitude/Longitude				
Category		Start		End				
Item	Vegetatio	n		37.8104	53°	37.814923°		
пеш				-121.4135	33 °	-121.416290 °		
DWR ID DWR_RD2089_02_s _ 2018_62								
			. ^					

Comment Code
V2 : Remove the wild growth other than native grasses from the levee

slopes.

Inspector Comment



View of wild growth on the partially visible landside slope. Spring 2018.

LM Start	0.46	Rating **	М	Issue No.		13
LM End	0.46	Issue Type +	Ма	Location *	CR	
Category	Earthen L	GPS La	atitud	le/Longitude		
Calegory				Start		End
Item	Animal Co	ontrol		37.8106	91 °	37.810691 °
пеш				-121.4140	14 °	-121.414014 °
DWR ID	DWR_RD2	089_02_s _ 201	2_13			·

#### Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment

Two old burrows that need to be filled.

## Photo 1 of 1 : SP\_2018\_RD2089\_317\_13\_20180507\_00015.jpg



11/10/2011 Two large burrows on crown, need to be filled.

LM Start	0.47	Rating **	М	Issue No.		10		
LM End	0.47	Issue Type +	Ma	Location *		CR		
Category Earthen Levee				GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item		rface / Depres	ssions /	37.8107	14 °	37.810714°		
пеш	Rutting			-121.4140	57°	-121.414057°		
DWR ID	DWR_RD2089_02_s _ 2012_10							
	Comment Code							

#### Comment Code

C3 : Add appropriate gravel or road base. Grade and compact.

### Inspector Comment

Surface depression needs to be filled.



11/10/2011 Depression in crown needs to be filled.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.50	Rating **	U	Issue No.	54		
LM End	0.50	Issue Type +	Ма	Location *		LS	
Catagony	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory	Category					End	
Item	Animal Control			37.8109	89°	37.810989°	
item			-121.414517 °		-121.414517°		
DWR ID	DWR_RD2	089_02_f _ 201	3_54				
		Comn	nent Cod	le			
A1 : Exterr	minate rod	ents and back	fill and c	compact or	grou	t burrows.	
Inspector Comment							
1							



View of the rodent burrow on the landside levee slope.

LM Start	0.52	Rating **	U	Issue No.		14	
LM End	0.52	Issue Type +	Ma	Location *		WS	
Category	evee	GPS Latitude/Longitude					
Calegory			Start		End		
Item	Animal Control				50°	37.811150 °	
пеш			-121.414748 °		-121.414748°		
DWR ID	ID DWR_RD2089_02_s _ 2012_14						

#### Comment Code

A2 : Repair the levee slope damaged by livestock and prevent large animal access.

#### Inspector Comment

11/10/2011 Repair damage to slope caused by livestock.

### Photo 1 of 1: SP\_2018\_RD2089\_317\_14\_20180507\_00016.jpg



11/10/2011 Approximately 1' scarp has been created by livestock travel.

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

0.54	Rating **	М	Issue No.		35			
0.54	Issue Type +	Ма	Location *		CR			
Earthen L	evee		GPS L	atitud	le/Longitude			
			Start		End			
Crown Surface / Depressions /					37.811382 °			
Rutting		-121.4150	)54 °	-121.415054 °				
DWR ID DWR_RD2089_02_f _ 2015_35								
	Comn	nent Cod	le					
r depressi	ons or ruts in	the crow	n or slope.					
Inspector Comment								
	0.54 Earthen Le Crown Su Rutting DWR_RD20	0.54 Issue Type + Earthen Levee  Crown Surface / Depres Rutting  DWR_RD2089_02_f_201: Comm r depressions or ruts in	0.54 Issue Type + Ma  Earthen Levee  Crown Surface / Depressions / Rutting  DWR_RD2089_02_f2015_35  Comment Coorr depressions or ruts in the crown	0.54         Issue Type +         Ma         Location *           Earthen Levee         GPS L           Start         Start           Crown Surface / Depressions / Rutting         37.8113           DWR_RD2089_02_f _ 2015_35         -121.4150           Comment Code         r depressions or ruts in the crown or slope.	0.54         Issue Type +         Ma         Location *           Earthen Levee         GPS Latitude           Crown Surface / Depressions / Rutting         37.811382 °           -121.415054 °           DWR_RD2089_02_f _ 2015_35           Comment Code           r depressions or ruts in the crown or slope.			

LM Start	0.54	Rating **	М	Issue No.	35 (cont)
LM End	0.54	Issue Type +	Ma	Location *	CR



View of the levee crown depression looking upstream.

Photo 2 of 4: SP\_2018\_RD2089\_317\_35\_20180507\_00032.jpg



View of the levee crown depression looking downstream.

LM Start	0.54	Rating **	М	Issue No.	35 (cont)
LM End	0.54	Issue Type +	Ma	Location *	CR

Photo 3 of 4 : SP\_2018\_RD2089\_317\_35\_20180507\_00033.jpg



View of the levee crown depression looking to the landside.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

#### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

	0.54	Dating **		Issue No.		05 (			
LM Start	0.54	Rating **	М	issue ivo.		35 (cont)			
LM End	0.54	Issue Type +	Ma	Location *		CR			
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
Calegory				Start		End			
Item		rface / Depres	ssions /	37.8113	82°	37.811382°			
item	Rutting			-121.415054 °		-121.415054°			
DWR ID DWR_RD2089_02_f _ 2015_35									
		Comn	nent Coo	le					
C2 : Repai	ir depressi	ons or ruts in	the crow	n or slope.					
		Inspecto	or Comm	nent					



View of the levee crown depression looking to the waterside.

LM Start	0.60	Rating **	A/W	Issue No.		56	
LM End	0.61	Issue Type +	Ma	Location *			
Category	Catagon Supplemental					e/Longitude	
Calegory				Start		End	
Item	2017 Stor	m Damage		37.8120	00°	37.812100 °	
пеш				-121.415700 °		-121.415900 °	
DWR ID DWR_RD2089_02_s _ 2018_56							

#### Comment Code

#### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:507

Site Designation:LMA-413

Repair Type: Erosion

Rating:Serious

Field Date:8/16/2017

Notes: Vertical cut on outside bend of river



# \* Location LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

Rating
A: Acceptable
M: Minimally Acceptable
U: Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma: Maintenance Deficiancy

Ob: Design & System Obsolescence

En: Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.60	Rating **	A/W	Issue No.		56 (cont)	
LM End	0.61	Issue Type +	Ma	Location *			
Catagony	Category				GPS Latitude/Longitude		
Calegory				Start		End	
Item	2017 Stor	m Damage		37.8120	00°	37.812100 °	
пеш				-121.4157	00°	-121.415900 °	
DWR ID	DWR_RD2089_02_s _ 2018_56						
	Comment Code						

#### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:507

Site Designation:LMA-413

Repair Type: Erosion

Rating:Serious

Field Date:8/16/2017

Notes: Vertical cut on outside bend of river

LM Start	0.60	Rating **	A/W	Issue No.	56 (cont)
LM End	0.61	Issue Type +	Ma	Location *	

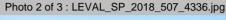




Photo 3 of 3: LEVAL\_SP\_2018\_507\_4340.jpg



N: Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma: Maintenance Deficiancy Ob: Design & System Obsolescence En: Enforcement

Page 19 of 30

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.66	Rating **	С	Issue No.		43		
LM End	0.66	Issue Type +	Ma	Location *		WS		
Category Earthen Levee				GPS La	atitud	le/Longitude		
Calegory		Start		End				
Item	Animal Co	mal Control			77°	37.812677	0	
пеш				-121.415393 °		-121.415393	0	
DWR ID	DWR_RD2	089_02_f _ 201	6_43					
		Comn	nent Cod	le				
A2 : Repai animal acc		slope damag	jed by liv	estock and	pre	vent large		
		Inspecto	or Comm	ent				

No Photos

LM Start	0.76	Rating **	М	Issue No.		15	
LM End	0.76	Issue Type +	Ма	Location *		LS	
Category Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End	
Item	Erosion /	Bank Caving		37.8139	34°	37.813934°	
item				-121.4143	20°	-121.414320 °	
DWR ID	DWR ID DWR_RD2089_02_f _ 2014_15					·	
	Comment Code						

E2 : Schedule repair of erosion site prior to the next inspection.

#### Inspector Comment

Photo 1 of 1: SP\_2018\_RD2089\_317\_15\_20180507\_00017.jpg



View of the scour from surface runoff on the landside levee slope.

LM Start	0.83	Rating **	М	Issue No.		21	
LM End	0.83	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	titud	e/Longitude	
Calegory				Start		End	
Item	Animal Co	ontrol		37.81477	73 °	37.814773	0
item				-121.4145	55 °	-121.414555	0
DWR ID	DWR_RD2	089_02_s _ 201	2_21				

Comment Code

A2 : Repair the levee slope damaged by livestock and prevent large animal access.

Inspector Comment

Livestock have worn paths into levee slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.83	Rating **	M	Issue No.		38		
LM End	0.83	Issue Type +	Location *	WS				
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Category				Start		End		
Item	Animal Co	ontrol		37.8148	44 °	37.814844°		
пеш	-121.414566 ° -121.414566							
DWR ID	DWR_RD2	089_02_s _ 201	2_38					
		Comn	nent Cod	le				
A3 : No rocompact o		le, but rodent rows.	burrows	visible; nee	ed to	backfill and		
		Inspecto	or Comm	nent				
Active burn	Active burrows present.							

No Photos

LM Start	0.84	Rating **	С	Issue No.		39	
LM End	0.84	Issue Type +	Ma	Location *	LS		
Category	Earthen L	nen Levee		GPS Latitude/Longitude			
Calegory				Start		End	
Item	Vegetatio	n		37.8149	17°	37.814917	0
item				-121.4147	09°	-121.414709	0
DWR ID	DWR_RD2	089_02_f _ 201	6_39				
		Comn	nent Coc	de			

Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Tumbleweeds on landside levee hinge and slope.

No Photos

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.84	Rating **	М	Issue No.	25		
LM End	0.84	Issue Type +	Ма	Location *		LS	
Category	evee	GPS Latitude/Longitude					
Calegory	Start					End	
Item	Vegetatio	n		37.81490	06°	37.814906 °	
пеш				-121.4147	45 °	-121.414745 °	
DWR ID	DWR_RD2089_02_s _ 2012_25						
	Comment Code						

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

Elderberry and blackberry on levee slope.

Photo 1 of 1: SP\_2018\_RD2089\_317\_42\_20180507\_00043.jpg

No Photos



View of the ramp on the landside levee slope.

LM Start	0.84	Rating **	М	Issue No.		42	
LM End	0.84	Issue Type +	Ма	Location *		LS	
Category	Earthen L	GPS Latitude/Longitude					
Calegory			Start		End		
Item	Slope Sta	bility		37.8149	31 °	37.814931	0
item				-121.4147	56°	-121.414756	٥
DWR ID	DWR_RD2089_02_f _ 2016_42						

#### Comment Code

S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.

#### Inspector Comment

Ramp is encroaching into the levee slope. Add appropriate material to stabilize the slope.

LM Start	0.85	Rating **	U	Issue No.		40		
LM End	0.90	Issue Type +	Ма	Location *		LS		
Category	Category Earthen Levee				GPS Latitude/Longitude			
Calegory						End		
Item	Animal Co	ontrol		37.8149	97°	37.814970	0	
пеш				-121.4147	74 °	-121.415767	0	
DWR ID	DWR_RD2089_02_s _ 2012_40							

#### Comment Code

A1 : Exterminate rodents and backfill and compact or grout burrows.

#### Inspector Comment

Numerous burrows on landside slope adjacent to hay storage area. Deep burrows in crown and landside ramp.

#### Photo 1 of 3: SP\_2018\_RD2089\_317\_40\_20180507\_00039.jpg



05/24/2011 Deep vertical burrow in ramp on land side of levee.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

LM Start	0.85	Rating **	U	Issue No.		40 (cont)
LM End	0.90	Issue Type +	Ма	Location *		LS
Category Earthen Levee				GPS Latitude/Longitude		
				Start		End
Item	Animal Co	ontrol		37.8149	97°	37.814970°
item				-121.4147	74 °	-121.415767°
DWR ID	DWR_RD2089_02_s _ 2012_40					
		Comp	ant Coc	10		

#### Comment Code

A1 : Exterminate rodents and backfill and compact or grout burrows.

#### Inspector Comment

Numerous burrows on landside slope adjacent to hay storage area. Deep burrows in crown and landside ramp.

LM Start	0.85	Rating **	U	Issue No.	40 (cont)
LM End	0.90	Issue Type +	Ма	Location *	LS



05/24/2011 Deep vertical burrow in levee crown.

Photo 3 of 3: SP\_2018\_RD2089\_317\_40\_20180507\_00041.jpg



View of the multiple rodent holes on the landside levee slope.

LM Start	0.91	Rating **	М	Issue No.		22		
LM End	0.91	Issue Type +	Ma	Location *		LS		
Category	Earthen Levee			GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Animal Co	ontrol		37.8149	03 °	37.814903	0	
пеш				-121.4158	87 °	-121.415887	0	
DWR ID	DWR_RD2	089_02_s _ 201	5_22					
	Comment Code							

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

		D (' ++			1		
LM Start	0.94	Rating **	М	Issue No.		41	
LM End	0.94	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS L	atitud	e/Longitude	
Calegory	Calegory					End	
Item	Encroach	ments		37.8149	940°	37.814940°	
пеш				-121.416499 °		-121.416499 °	
DWR ID	DWR_RD2	089_02_s _ 201	2_41				
		Comn	nent Cod	le			
PI : Pipe							
		Inspecto	or Comm	nent			
Debris/CMP on levee slope needs to be removed.							



05/24/2011 Old CMP left on waterside levee slope, needs to be removed.

Photo 1 of 1: SP\_2018\_RD2089\_317\_5\_20180507\_00005.jpg

LM Start	0.95	Rating **	U	Issue No.		5
LIVI Otali	0.00	3				<u> </u>
LM End	0.95	Issue Type +	Ma	Location *		LS
Category Earthen Levee				GPS La	atitud	e/Longitude
Calegory		Start End				End
Item	Animal Co	ontrol		37.814915°		37.814915 °
item				-121.4166	06 °	-121.416606°
DWR ID	DWR_RD2	089_02_s _ 201	4_5			
Comment Code						
A1 · Extern	minate rod	ents and back	fill and o	compact or	arou	t burrows

Inspector Comment

View of the rodent holes on the landside levee slope.

LM Start	1.00	Rating **	U	Issue No. 12		12		
LM End	1.00	Issue Type +	Ma	Location *	CR			
Catagonia Earthen Levee				GPS Latitude/Longitude				
Calegory	Category					End		
Item	Animal Co	ontrol		37.8151	82°	37.815182°		
пеш				-121.4174	39°	-121.417439°		
DWR ID DWR_RD2089_02_f _ 2014_12								

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment



View of several large rodent holes on the levee crown.

* Location		** Rating		+ Issue Type
LS: Land Side	N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

LM Start	1.00	Rating **	U	Issue No.	12 (cont)		
LM End	1.00	Issue Type +	Ma	Location *	CR		
Category Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
ltom	Animal Control				37.815182°		0
Item			-121.417439 °		-121.417439	٥	
DWR ID DWR_RD2089_02_f _ 2014_12							
Comment Code							

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment



View of several rodent burrows on landside levee hinge and crown.

LM Start	1.05	Rating **	N	Issue No.		29	
LM End	1.05	Issue Type +	Ма	Location *	WS		
Catagony	Earthen Levee			GPS Latitude/Longitude			
Category				Start		End	
Item	Trim / Thi	n Trees		37.8156	29°	37.815629°	
item				-121.4181	33 °	-121.418133°	
DWR ID	DWR_RD2	089_02_s _ 201	2_29			·	

#### Comment Code

T5: Tree stumps.

#### Inspector Comment

14" dia stump. Could not verify as the area is overgrown with high weeds.

Photo 1 of 1 : SP_2018_RD2089_317_29_20180507_00028.jpg	
TORON NO AND	



Tree stump >2" left after vegetation and tree removal.

LM Start	1.08	Rating **	М	Issue No.		17		
LM End	1.08	Issue Type +	Ма	Location *	WS			
Category	Earthen Levee			GPS Latitude/Longitude				
Calegory	Calegory			Start		End		
Item	Encroach	ments		37.81602	25 °	37.816025		
item			-121.41854	14 °	-121.418544			
DWR ID	DWR_RD2	089_02_s _ 201	2_17					

Comment Code

DE : Debris

#### Inspector Comment

Water tanks disposed of on levee are obstructive.



View of water tanks disposed on waterside slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

LM Start	1.12	Rating **	М	Issue No.		30
LM End	1.12	Issue Type +	Ма	Location *		WS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Vegetatio	n		37.8165	14°	37.816514°
item				-121.418948 °		-121.418948 °
DWR ID	DWR_RD2	089_02_s _ 201	2_30			
		Comn	nent Cod	le		
V4 : Elderb	perries are	blocking visib	ility and	flood fight	сара	bility.
Inspector Comment						

No Photos

LM Start	1.18	Rating **	М	Issue No.	6			
LM End	1.18	Issue Type +	Ма	Location *	LS			
Category Earthen Levee				GPS Latitude/Longitude				
Category			Start		End			
Item	Animal Co	ontrol		37.8172	71 °	37.817271 °		
iteiii				-121.419380 °		° -121.419380 °		
DWR ID DWR_RD2089_02_s _ 2014_6								
	Comment Code							

A1: Exterminate rodents and backfill and compact or grout burrows.

Inspector Comment



View of the large rodent hole on the landside levee slope.

N: Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

LM Start	1.24	Rating **	U	Issue No.		31
LM End	1.24	Issue Type +	Ma	Location *		WS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Vegetatio	n		37.8180	51 °	37.818051 °
item				-121.4197	43°	-121.419743°
DWR ID	DWR_RD2	089_02_s _ 201	2_31			
		Comn	nent Cod	le		
V4 : Elderb	perries are	blocking visib	ility and	flood fight	сара	bility.
		Inspecto	or Comm	nent		
Trim back	the shrub	to allow acces	ss and vi	sibility.		

No Photos

LM Start	1.24	Rating **	U	Issue No.		28
LM End	1.24	Issue Type +	Ма	Location *		LS
Category	Earthen L	evee		GPS Latitude/Longitu		
Calegory	<u> </u>			Start		End
Item	Animal Control		37.8181	12°	37.818112°	
пеш				-121.4197	'20 °	-121.419720°
DWR ID	DWR_RD2	089_02_f _ 201	6_28			
		Comn	nent Cod	le		
A1 : Exterr	minate rod	ents and back	fill and c	compact or	grou	t burrows.
		Inchacte	or Comm	ont		

Inspector Comment



View of the rodent burrow in the landside levee slope.

LM Start	1.27	Rating **	С	Issue No.		45	
LM End	1.27	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroach	ments		37.8185	85 °	37.818585	0
iteiii				-121.4197	34 °	-121.419734	0
DWR ID	DWR_RD2	089_02_s _ 201	7_45				
		Comn	nent Cod	le			

TR: Tree or limb

### Inspector Comment

Remove down tree limb from the levee slope.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

LM Start	1.29	Rating **	U	Issue No.		19
LM End	1.29	Issue Type +	Ма	Location *		LS
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Calegory			Start		End	
Item Animal Control				37.8187	40°	37.818740 °
				-121.4197	59°	-121.419759 °
DWR ID	DWR_RD2	089_02_f _ 201	6_19			
		Comn	nent Cod	le		
A3 : No ro compact o		le, but rodent rows.	burrows	visible; nee	ed to	backfill and
		Inspecto	or Comm	nent		



View of the rodent burrow in the landside levee slope.

LM Start	1.29	Rating **	A/W	Issue No.		32	
LM End	1.29	Issue Type +	Ma	Location *		WS	
Catagony	Category Earthen Levee				GPS Latitude/Longitude		
Calegory				Start		End	
Item	Vegetatio	n		37.81882	9°	37.818829°	
пеш				-121.41977	'6	-121.419776°	
DWR ID	DWR_RD2	089_02_s _ 201	2_32				
		Comn	nent Cod	le			

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

LM Start	1.29	Rating **	N	Issue No.		18
LM End	1.29	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee		GPS L	atitud	e/Longitude
Odlogory			Start		End	
Item	Trim / Thin Trees			37.8188	843°	37.818843°
пеш	em				'62 °	-121.419762 °
DWR ID	DWR_RD2	089_02_f _ 201	6_18			
		Comn	nent Cod	le		
T5 : Tree s	stumps.					
		Inspecto	or Comm	nent		



View of the tree stump from the levee crown.

LM Start	1.30	Rating **	U	Issue No.		16
LM End	1.30	Issue Type +	Ма	Location *		LS
Category	Earthen L	evee		GPS Latitude/Longitude		
Calegory				Start		End
Item	Animal Co	ontrol		37.8189	87°	37.818987 °
item				-121.4197	67°	-121.419767°
DWR ID	DWR_RD2	089_02_s _ 201	5_16			
		Comn	nent Cod	de		
A1 . Extor	minata rad	anta and haal	fill and a	ompost or	arou	t hurrowo

A1: Exterminate rodents and backfill and compact or grout burrows.

#### Inspector Comment



View of the rodent burrow in the landside levee slope.

Photo 1 of 1: SP\_2018\_RD2089\_317\_11\_20180507\_00012.jpg

LM Start	1.33	Rating **	U	Issue No.		11
LM End	1.33	Issue Type +	Ма	Location *		LS
Category	Earthen L	evee		GPS La	titud	e/Longitude
Calegory				Start		End
Item	Animal Co	ontrol		37.8193	71 °	37.819371 °
пеш				-121.4197	74 °	-121.419774 °
DWR ID	DWR_RD2	089_02_f _ 201	4_11			

#### Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

### Inspector Comment

Some of the rodent hole openings have collapsed.

	Water and		1	
		1	Hite	
Car and	- 49	Line		250
	* * *		· C,	
19/2				·

View of the multiple rodent burrows on the landside levee slope.

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy

C: Corrected Ob: Design & System Obsolescence

C: Corrected AW: Acceptable but Monitor & Maintain

AW: Acceptable but Monitor & Maintain

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

### **Reclamation District No. 2089 Stark**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Salmon Slough	Right	1.35	05/15/2018 05/15/2018	Zach Jojola

N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement